

Minutes, 11/10/04 Tevatron BPM Upgrade Meeting
Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

1. Report from Bob and Steve
2. Report from subproject leaders
3. Report from Technical Coordinator -- Jim Steimel
4. AOB

1. Report from Bob and Steve.

- Beam schedule is the following. Tev cold Nov 15. Ramps Nov 22. Beam Nov 29. First collisions Dec 7. We should keep these dates in mind as we prepare to commission the system.

- Bob Webber showed the status of cable testing done by Marv Olson and Judy Szabo. So far all of the 6 foot labeled cables were tested and the list of failed cables (phase difference criteria and bad connector/connections) is found in AD Doc #1444. The plan is to return the cables with bad connector/connections, to inform the company about the cables that failed the specs, ask for new labels so that we can use some of the unlabelled 6 foot cables to replace the bad cables. Next up are the 4 inch cables.

2. Reports from L2 Managers

Tim Kasza:

- Tim's slides can be found in AD doc #1381-v8.

- Echotek testing. 5 boards are being returned to Echotek because of hardware problems. The remaining boards' testing is on hold until the final firmware from Echotek is available to solve the ADC bit problem. Once that is here the 78 untested boards will go through the tests and once we see the results there we can decide what to do about the boards that have passed. All boards will have their firmware upgraded.

- This led to a discussion of tracking and verifying firmware, software, hardware, etc. versions on boards, in the system etc. For the Echotek boards and for this particular firmware Tim's group will be ensuring that the boards all have the correct firmware.

- Analog filters. Nothing new.
- Cables. More cables have arrived. The 36 foot cables are the only cables that are not yet in our hands.
- Tim met Tuesday with a group to discuss testing of the filter and timing boards when they begin to arrive. The discussion will continue and everyone with ideas or requirements for this testing should speak up soon.
- There was a question here about teststands and the ability to get enough set up for all of the hardware checkout, software studies, system tests, etc. that will be required for the next months. In particular the question of the number of TCLK, BSYNCH, 53 MHz signals came up. And the expectation for having these signals actually functioning at any given moment in time. All of this needs to be carefully considered and solutions found as we move forward.

Rob Kutschke:

- Rob is looking at old data to understand the robustness of the proton cancellation.

Margaret Votava:

- Another discussion of versioning, how we track it, how the information is stored, how we ensure proper consistency, etc.
- We had a discussion about the slow abort buffer, how it is computed and stored, how that might impact the 500 Hz closed orbit rate, etc. Rob Kutschke has a proposal for this (sent out) and Jim will keep this in mind as he works on the modes of operation document. Also needed in the front-end specification.

Brian Hendricks:

- Making bug fixes to the libraries. Working on access to frame types in T39.
- W25 work is still awaiting some information from Luciano.
- Discussed options for crate monitoring of the Dawn VME crates. Most seem to favor the Optilogic box. The cost is about \$200 per box so for 27 crates the cost is \$5400. The software effort is not yet costed but it is assumed that using an identical device will help reduce that

effort. It does give an interface that is common in AD.

Vince Pavlicek:

- Vince showed some filter board attenuation measurements from the 5 prototype boards. The distribution is quite narrow. The question of whether we should measure these as part of the acceptance of the board came up. The distributions will be placed in the AD doc DB.

- The bids for the timing and filter boards are due at the end of the day Wednesday November 10.

- Gustavo, Eric and Ted Zmuda are busy studying the Echotek board.

3. Technical Coordinator -- Jim Steimel

- The document for commissioning and modes of operation should be completed (version 1) by Friday of this week.

4. AOB.

- Will meet Thursday November 11 at 1:30 P.M. to discuss new Echotek/filter results and commissioning and modes of operation.

- Plan to meet Monday November 15 at 11:00 A.M. to discuss calibration.